

ULTRA-PORTABLES

INTRODUCTION

Most laptops rarely travel further than from the sofa to the kitchen table, but ultra-portables are designed for greater things. With weights as low as 1kg and battery lives up to six hours, the models in this month's Labs can travel with you every day. They're stuffed with ways to connect to other devices wirelessly, and some even have a 3G mobile broadband modem, allowing you to browse the web when you're miles from a wireless hotspot.

With prices ranging from £240 to £1,245, we've taken a wide cross-section of models to see what's available at different budgets. So whether you want to catch up on emails on the train, check the weather forecast on a mountain-top or watch *Snakes on a Plane* in the departure lounge, there's an ultra-portable laptop here for you.

Ben Pitt
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TINY LAPTOPS

If you need to work on the move, these nine lightweight laptops will take the weight off your shoulders – but not your bank balance

Choosing an... Ultra-portable laptop

All laptop PCs have some compromises, and an ultra-portable simply skews the balance more in favour of mobility. Luxuries such as massive screens and supercharged 3D games performance are out, and low weight, long battery life and tough chassis are in. However, finding the right balance is a tricky process, not just for laptop designers, but also for customers. There's more than one great model among the nine in this month's Labs, so it's worth bearing a few things in mind when deciding which is right for you.

TRIP THE LIGHT FANTASTIC

The average laptop weighs around 3kg, so something has to give to make one that's nearer 1kg. The nine models in this Labs test approach this challenge in a number of different ways. Arguably the simplest is Acer's Aspire 2920. It has a 12.1in screen, but otherwise its design, internal components and price aren't much different to the 17in Acer 7720G in last month's Labs. This makes it the heaviest laptop here, but also the most powerful and, arguably, the best value.

The laptops from Asus and Vye take the opposite approach. At around 1kg, these really are featherweights, but they achieve it by using cramped screens and keyboards, small batteries and low-power

components that stop the diminutive chassis getting too hot but also limit performance.

Another common technique is to reduce size and weight by omitting features. Four of these laptops don't have a built-in optical drive, which is reasonable since many people use them only occasionally to install software. However, we appreciate Packard Bell's inclusion of an external USB DVD writer in the box, especially as it's one of the more affordable laptops.

We also appreciate how the Toshiba and Vye laptops have built-in DVD writers and yet are among the lightest models in the group. In doing so, they demonstrate that making a light laptop is also about clever design. The Toshiba is the best example, as it has no notable omissions or downscaled components and yet is very thin and light. However, its one compromise is its thin, plastic chassis, which doesn't feel as sturdy as those of the competition. It's difficult to say whether or not this equates to inferior build quality, though. Most laptops would suffer serious damage if you dropped them, and the internal components would usually fail before a chassis became physically damaged.

Like all the other £1,000-plus laptops here, the Toshiba has a motion sensor that parks the hard disk's head if it detects rough treatment, reducing the chances





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of the head hitting the disk's platters and causing damage. However, we're sceptical that these systems, which detect excessive forces, are smart enough to brace for impact when they detect no force at all – that is, when they're in freefall. The visual feedback provided by the laptops reviewed here suggests that this technology is only really effective at protecting against repeated shakes rather than a quick trip towards the floor.

POWERING FORWARDS

Battery life is just as important as weight in an ultra-portable laptop. This depends on a number of variables, and again, some of these demand compromise in other areas. The size of the battery directly affects how much charge it can hold, but a bigger battery weighs and costs more. The other approach is to use less power-hungry components. Most LCD screens use fluorescent tubes to illuminate them from behind, but ones that use LEDs are more energy efficient.

Processors also vary greatly in their power consumption. Various tricks are employed to increase the efficiency of laptop processors, but ultimately, the most effective technique is to run them at a lower clock speed. Doing so directly reduces energy consumption and also reduces the need for power-guzzling cooling fans. This is why many of the laptops reviewed here don't perform as well as similarly priced desktop-replacement laptops. No ultra-portable laptop

we know of has a powerful graphics processor, as the ability to play 3D games is way down on the list of priorities compared with battery life.

UPWARDLY MOBILE

Because ultra-portable laptops are often used for work, many of the models here include features specifically designed for business users. Windows Vista Business and XP Professional provide better backup and networking facilities than Vista

Home Premium at the expense of features such as Media Center, while fingerprint readers are a secure alternative to password-protection. Many include a 3G modem as standard or as an optional extra for broadband internet access on the move. See the box below for details.

Whether it's for business or pleasure, the laptops in this month's Labs have a huge amount to offer, so turn the page to find your perfect travelling companion.

Internet access on the move Enhanced 3G

In next month's *Mobile Expert* we'll explain how to access the internet using wireless hotspots, but if you're away from civilisation the best way to get online is to use a dedicated 3G modem. These use an enhanced form of 3G called High-Speed Downlink Packet Access (HSDPA), also known as 3G+ or 3.5G, which increases download speeds to 1.8Mbit/s and beyond.

Network support isn't as widespread as it is for normal 3G, but the major providers have most UK towns, cities and surrounding areas covered. Some providers are already beginning to roll out even faster networks, with 3 supporting speeds up to 2.8Mbit/s. Vodafone's latest network runs at 7.2Mbit/s,

with HSPA+ boosting uploads from 384Kbit/s to 1.8Mbit/s, although it's currently available only in a tiny proportion of the UK. Modems will connect to the fastest available network, falling back to GPRS if necessary.

HSDPA modems are built into the Fujitsu Siemens and Lenovo laptops, and are available as an upgrade to the HP and in alternative configurations of the Rock and Toshiba laptops. However, only the Fujitsu Siemens supports the fastest transfer speeds.

Another option is an external 3G modem, available in USB, CardBus and ExpressCard formats from mobile providers. These cost around £100, or are free with contracts starting at £10 per month for 1GB of data.



ASUS Eee PC 701

★★★★★



£240 inc VAT

From www.rlsupplies.co.uk

Asus's Eee PC has caught many an eye in the *Shopper* office, which is quite an achievement considering its amazingly low price. Weighing just 900g, it's about the size of a hardback novel so it doesn't require a dedicated laptop bag and will easily fit into a school satchel.

Various sacrifices allow Asus to make the Eee PC so affordable. Instead of a hard disk, there's a 4GB solid-state disk (SSD), which reduces costs and is also more robust than a conventional hard disk (a 2GB version is available for £215). There's 2.5GB free for user files, and an SD memory card slot allows for additional storage.

The 7in screen doesn't fill the lid, leaving room for speakers on either side. Its 800x480 resolution is too small to run Windows comfortably, but the Eee PC is based on a free Linux-based operating system with a graphical user interface customised by Asus. OpenOffice, Firefox, a media player and various other applications are preinstalled, and connecting to a wireless network and using these applications requires no specialist Linux knowledge. However, installing other applications, adding a printer and adjusting advanced settings can be much harder than it is under Windows. Sadly, the software bundle doesn't include a calendar or contacts software. (See *Mobile Expert*, page 178, for our guide to using the Eee PC.)

The keyboard and touch pad are fairly high quality but they're smaller than usual, which makes typing difficult. The small screen means spreadsheets are awkward to manage as are websites that require horizontal as well as vertical scrolling. The SSD isn't big enough for Windows and our benchmark software, but the Eee PC can run Firefox and OpenOffice well. However, the media player had playback glitches and lost audio-video sync. Its battery life is also poor at two-and-a-half hours.

If you want to do more than type documents and surf the web you should buy Acer's Aspire 2920, but the Eee PC is brilliant as a simple PC. It's a bargain and a Best Buy.

SUMMARY

- ✓ Extremely small and light
- ✓ Amazingly low price
- ✗ Basic

ULTRA-PORTABLE LAPTOP Intel Celeron M 900, 512MB RAM, 4GB disk, Intel GMA 950 graphics, 7in widescreen LCD, 900g
PART CODE EEE PC 701-W
DETAILS <http://eeepc.asus.com/uk>



PACKARD BELL BG46-P-004

★★★★

£550 inc VAT

From www.pcworld.co.uk

The BG46's brushed aluminium keyboard surround and 1.6kg weight mean it doesn't look out of place next to laptops that cost over £1,000. Instead of an integrated DVD writer, the BG46 is supplied with an external USB drive. This isn't as neat as an internal drive, but being able to leave it at home saves weight. The only downside is that you can't watch DVDs on the move. Then again, watching a full-length film is likely to be too much for the BG46's battery, as it lasted for only two hours and 16 minutes in our light-use test.

It's no surprise that a 3G modem isn't built in at this price, but as there's no CardBus slot you'll have to use an untidy USB dongle. The wireless networking adaptor doesn't support Draft-N, and there's no Bluetooth for getting online via a mobile phone.

The 12in screen's colours were a little muted and images from the integrated webcam suffered from the same problem, but it's a nice extra that many of the other laptops lack. The keyboard is mostly excellent, although we repeatedly hit the Cursor Up key when aiming for the right Shift key. With time, though, we'd probably get used to the slightly odd layout. The touch pad is precise, although its round shape is awkward and a clear example of form over function.

The laptop's 1.66GHz Core 2 Duo processor coped well with our Windows performance tests, with the generous 2GB of RAM coming in particularly useful in the multitasking test. Like all the laptops in the group, it couldn't run our Call of Duty 2 test.

The BG46 is compact, stylish, fast and surprisingly affordable. However, its battery life and wireless connectivity options are minimal, and these are critical areas for ultra-portable laptops. If you just need something for the home, office, hotel rooms and trains with power sockets, it's an excellent choice. However, if your computing needs are less predictable and your budget is limited, Acer's Aspire 2920 makes more sense.

SUMMARY

- ✓ Looks great; good value
- ✓ Good all-round performance
- ✗ Poor battery life

ULTRA-PORTABLE LAPTOP Intel Core 2 Duo T5450, 2GB RAM, 160GB disk, Intel GMA X3100 graphics, external USB DVD+/-RW +/-DL, 12in widescreen LCD, 1.6kg
PART CODE 584721
DETAILS www.packardbell.co.uk



ACER Aspire 2920

★★★★★



£600 inc VAT

From www.comet.co.uk

Acer's Aspire 2920 only narrowly qualifies as an ultra-portable. At 38mm thick, it looks like a normal laptop except for its 12.1in screen. Still, the 2.1kg weight will make less of a dent on your shoulder than the usual 3kg laptops, and the battery lasted for an impressive four hours and 17 minutes in our light use test. It will also be gentler on your bank balance than most of the laptops here.

There's no shock protection for the hard disk or a fingerprint reader to secure your files, which are both common features on the more expensive models. Windows Vista Home Premium is installed and there's a high-quality integrated webcam, showing that this laptop is aimed more at home than business users. Home users will appreciate the 2GHz Core 2 Duo processor and 2GB of RAM, which will cut through any type of software except 3D games. Its Intel GMA X3100 graphics may handle a few golden oldies but won't run newer titles at all. The 250GB hard disk is enough for masses of photos and MP3s, and means that this could be the only PC you'll need. The lack of a FireWire port is disappointing, though, as the 2920 would make an excellent laptop for video editing.

The 12.1in, 1,280x800-pixel glossy screen is bright with richly saturated colours, although poor vertical viewing angles mean you need to make sure it's angled straight towards you for accurate hues. The keyboard feels reasonably sturdy but it doesn't use the entire width of the chassis. As a result, the punctuation keys have been slimmed down and don't fall under the fingers, making accurate touch-typing difficult.

If you need a laptop to carry with you every day, one of the lighter models makes more sense. However, nearly all of these are more suited to being a second computer to a more powerful desktop PC with a bigger hard disk. For those looking for a single laptop to cover both bases, the 2920 is a sensible compromise and excellent value.

SUMMARY

- ✓ Very strong performance
- ✓ Huge hard disk
- ✗ Relatively bulky

ULTRA-PORTABLE LAPTOP Intel Core 2 Duo T7300, 2GB RAM, 250GB disk, Intel GMA X3100 graphics, DVD+/-RW +/-DL, 12.1in widescreen LCD, 2.1kg
PART CODE LX.ANK0X.239
DETAILS www.acer.co.uk



VYE mini-v S41

★★★

£849 inc VAT

From www.laptopsdirect.co.uk

Vye's mini-v S41 is dwarfed by most of the other laptops here, as it is just 230mm wide. Amazingly, Vye has squeezed a fully featured Vista laptop into this tiny chassis, complete with an 80GB hard disk, 802.11g wireless, Bluetooth, a webcam and even a DVD writer.

The 7in touch-sensitive screen rotates and folds face-up to exploit Vista's excellent handwriting recognition. However, unlike the HP's screen, this one reacts to accidental contact from the palm of the hand and not just the supplied stylus. The keyboard is quicker for inputting text, even though its reduced size makes typing a little fiddly. There's a touch point mounted beside the screen as well as an undersized touch pad below the keyboard.

The screen's 1,024x600 resolution makes Vista feel pretty cramped, and the 800MHz Intel A110 processor isn't fast enough to run it smoothly. Applications took a long time to load, and the BBC iPlayer video-on-demand service was way beyond its capabilities. Playing a DVD in Windows Media Player resulted in jerky playback, too, although CyberLink PowerDVD was fine and films looked great on the screen. The built-in speakers were above average too, but the headphone output didn't work on our review sample.

Considering its slow processor and small screen, the S41's battery life is seriously disappointing. It managed only two hours and 40 minutes in our light-use test, and less than two hours playing a DVD.

The S41 is a fun gadget and an impressive feat of miniaturisation, but it's hard to know who it's aimed at. The small screen and limited power mean it's not an entertainment PC, while those who need something this small for work may as well go for the more affordable Asus Eee PC. The SD and CompactFlash slots, high-quality screen, 80GB hard disk and DVD writer make it a tempting option for photographers working on location. However, they too might be put off by the limited battery life and sluggish performance.

SUMMARY

- ✓ Extremely small and light
- ✗ Poor performance
- ✗ Disappointing battery life

ULTRA-PORTABLE LAPTOP Intel A110, 1GB RAM, 80GB disk, Intel 945 Express graphics, DVD+/-RW +/-DL, 7in widescreen LCD, 1.1kg
PART CODE RC0217CAL030
DETAILS www.vyepc.com



ROCK Pegasus 210

★★★★

£1,056 inc VAT

From www.rockdirect.com

If you spend a lot of time in departure lounges or using your computer at the bottom of your garden, the Pegasus 210 could be just what you're looking for. It survived for over six hours in our light-use battery test. Rather than use a massive battery, the 210 manages this through the use of components with extremely low power consumption. Even at full tilt, it consumes just 16W. The screen is backlit using LEDs rather than fluorescent tubes, and the Intel A110 processor has a single core that runs at 800MHz.

The inevitable downside is performance that can be politely described as basic, as demonstrated by a score of 44 overall in our Windows benchmarks. In practice, this didn't hamper simple tasks such as basic web browsing and word processing, but more demanding software was painfully slow, and navigating Windows felt pretty lethargic, too. The laptop comes with a choice of Windows Vista Business or XP Professional. We recommend the latter for the lower demands it places on the hardware.

Build quality is excellent. The slim, magnesium alloy lid provides ample protection for the high-quality 12in screen. The keyboard isn't as satisfying to type on as the HP or Lenovo's keyboards and its single-height Return key is easy to miss, but it's spill-resistant and feels robust. It's also reassuring to have a three-year pan-European warranty.

The performance rules out entertainment software, so the 80GB disk should be sufficient, but it's a little disappointing that a DVD writer isn't integrated or an external drive supplied as standard. A 3G modem capable of speeds up to 3.6Mbit/s is built into the Pegasus 210 3G, which costs £118 more.

The Pegasus 210's build quality, weight and battery life are among the best here, but we wouldn't be happy to spend over £1,000 on a laptop that trundles along at such a leisurely pace. The Toshiba doesn't feel as robust but it has more all-round appeal.

SUMMARY

- ✓ Superb battery life
- ✓ Strong and light
- ✗ Poor performance

ULTRA-PORTABLE LAPTOP Intel A110, 1GB RAM, 80GB disk, Intel GMA 950 graphics, 12in widescreen LCD, 1.4kg
PART CODE P210
DETAILS www.rockdirect.com



TOSHIBA Portege R500-11B

★★★★★

COMPUTER
SHOPPER
BEST BUY

£1,096 inc VAT

From www.morecomputers.co.uk

The R500 isn't quite the lightest laptop here, but as it includes a 12in screen and DVD writer, its 1.1kg weight is extraordinary. Build quality isn't as reassuring as we'd like, though. The plastic chassis looks a little cheap in the flesh and the lid, which is just 5mm thick, flexes under pressure.

The screen isn't as bright as the others and its viewing angles are poor. Along with the hopelessly tinny speakers, this isn't a good choice for watching DVDs. However, the screen is transfective, which means its pixels are lit by light shining on the screen as well as by the backlight. This is a great benefit for outdoor use as the screen is less prone to reflections and you can turn off the backlight to conserve the battery. Even when using the backlight, which uses low-power LEDs rather than fluorescent tubes, the R500 lasted for over five hours in our light-use test. Charging the battery from flat is slow, though, taking around three hours.

Another reason for the excellent battery life is the use of an ultra-low voltage (ULV) processor, but its 1.2GHz clock speed isn't such great news for performance. The 1GB of RAM is equally conservative, and a score of 93 overall in our Windows benchmarks means this isn't a laptop for intensive tasks. It's perfectly adequate for office software and a bit of light photo editing, though.

Draft-N wireless and Bluetooth are built in, but the lack of a dial-up modem could be a nuisance in hotels without wireless network access. There's a CardBus slot for adding a 3G modem more neatly than via USB, but the slot's recessed location means it might not accommodate cards with a bulky protrusion. If you want an internal 3G modem, you'll need to spend £1,350 on the R500-3G125, which also has a 1.33GHz processor, 2GB of RAM and a 160GB hard disk.

The Portege R500-11B's low weight, great battery life and plentiful features are a winning combination.

SUMMARY

- ✓ Extremely light
- ✓ Plenty of features
- ✗ Screen feels flimsy

ULTRA-PORTABLE LAPTOP Intel Core 2 Duo U7600, 1GB RAM, 120GB disk, Intel 945GM graphics, DVD+/-RW DL, 12in widescreen LCD, 1.1kg
PART CODE PPR50E-00L048EN
DETAILS www.toshiba.co.uk



LENOVO ThinkPad X61s

★★★★

£1,190 inc VAT

From www.laptopsdirect.co.uk

The X61s's predecessor won our ultra-portable laptop Labs a year ago. This updated model uses the same chassis and includes a few upgrades to the internal components. It runs Windows XP, so it feels a bit more zippy to use than the Vista laptops here.

The integrated 3G modem comes with a Vodafone SIM card installed and ready to go, subject to signing up to a subscription package. The Vodafone-branded software wasn't as helpful when we inserted a 3 SIM card, but once configured we had no problems and were able to track and cap usage and send text messages. However, this modem doesn't support the latest 7.2Mbit/s networks, with downloads limited to 1.8Mbit/s. These faster networks are currently only available in a few select locations, but we'd still prefer support for them, especially in an integrated modem.

The 1.6GHz Core 2 Duo processor, 2GB of RAM and 160GB hard disk add up to a highly capable PC that will zip through creative as well as office tasks. The screen might be a limitation, though, as its 1,024x768 resolution feels cramped compared with the 1,280x800 widescreens used elsewhere. It also gave a slight red tint to photos, which will make accurate graphics work tricky. The keyboard is superb, though, with a firm, responsive action and excellent layout. The laptop has a touch stick rather than touch pad, which takes a little getting used to but isn't a significant hindrance.

At 1.4kg, this is one of the lighter models here, but it's not so impressive considering that there's no DVD drive. Its portability credentials are further tarnished by the three-hour battery life – all the other models costing over £1,000 managed at least four hours. This is particularly disappointing as the L7500 processor is a low-voltage chip designed to extend battery life.

If integrated 3G is essential, the Fujitsu-Siemens Lifebook's 7.2Mbit/s network support and longer battery life make it a better option, but the X61s's superior keyboard makes it a reasonable choice for office work.

SUMMARY

- ✓ Excellent build quality and ergonomics
- ✓ 3G modem built in
- ✗ Disappointing battery life

ULTRA-PORTABLE LAPTOP Intel Core 2 Duo L7500, 2GB RAM, 160GB disk, Intel GMA X3100 graphics, 12.1in LCD, 1.4kg
PART CODE UK44CUK
DETAILS www.lenovo.com/uk



HP Compaq 2710p

★★★★

£1,197 inc VAT

From www.hp.co.uk

The 2710p is the best-looking laptop in this month's Labs, and even gives the flashy MacBook Air a run for its money. However, it also shares some of the Air's limitations, with no DVD drive or PC Card slot and just an 80GB hard disk. Considering the stripped-down features, the 1.7kg weight is disappointing. Build quality is first rate, though, with no hint of flexing under pressure from the screen or keyboard.

The 12.1in screen is bright and vibrant but has a slightly grainy finish that can be a little distracting. It rotates and folds face up against the keyboard and responds to the supplied stylus, turning the 2710p into a tablet PC. Windows' handwriting recognition is extremely fast, effective and actually quite fun to use.

The keyboard is even faster, though, with a robust, positive action and an excellent layout, and there's a decent touch stick in place of a mouse. As such, the Tablet PC features will be little more than a gimmick except in situations where you need to use the laptop standing up – for stock checks, perhaps. This aptitude for use on the move means the lack of Draft-N wireless networking or a 3G modem is disappointing. The latter is available as an internally fitted module for around £200.

The Intel Core 2 Duo U7600 is an ultra-low voltage (ULV) processor. This means that it's designed for extended battery life, but this is achieved primarily by a relatively low 1.2GHz clock speed. Battery life is excellent at four hours and 46 minutes, but it's not hugely different to the faster Fujitsu-Siemens and Acer laptops. Meanwhile, a score of 93 overall in our Windows benchmarks shows that the Compaq 2710p will be fine for most work-related tasks but isn't ideal for running creative software.

HP's Compaq 2710p is a pleasure to use, but unless the Tablet PC features are essential it's hard to justify spending this much when faster performance, better features and increased portability are available for less.

SUMMARY

- ✓ Excellent build quality and ergonomics
- ✓ Tablet PC features
- ✗ Basic core components

TABLET PC Intel Core 2 Duo U7600, 1GB RAM, 80GB disk, Intel GMA X3100 graphics, 12.1in widescreen LCD, 1.7kg
PART CODE RU539ET#ABU
DETAILS www.hp.co.uk



FUJITSU SIEMENS Lifebook S6410

★★★★★

£1,245 inc VAT

From www.laptopsdirect.co.uk

Our first impressions of the S6410 weren't great. At 1.8kg, it's the second-heaviest laptop in the group and its plain looks, 1GB of RAM and 80GB hard disk aren't what we expect at this price. The 2GHz Core 2 Duo processor performs well but we'd recommend spending another £30 on an additional 1GB of RAM to boost performance in demanding tasks.

Closer inspection revealed lots of strengths, though. At four hours and 18 minutes, battery life is excellent considering the fast processor, although charging from flat is slow at around three hours. There's support for every form of wireless communication: Bluetooth, infrared, 802.11a/b/g and Draft-N, plus a 3G modem for broadband access on the move. Unlike other integrated 3G modems we've seen, this one supports download speeds up to 7.2Mbit/s and HSPA for uploads up to 2Mbit/s, network permitting. We inserted a SIM card and were online within minutes, thanks to a friendly 3G Watcher utility that also keeps track of usage.

The chassis incorporates a DVD writer, basic webcam, one FireWire and three USB2 ports and a fingerprint reader. There's a clutch of buttons for launching Vista Business's backup module, locking the laptop and entering a power-save mode. The 13.3in screen is the largest here and its colours are vibrant and accurate, but the glossy finish causes reflections under office lighting. The keyboard is spill-proof and its layout is hard to fault, but the keys feel squishy and the whole keyboard sags under pressure. We still found it quick to type on, but not particularly pleasant.

The 3G modem is the S6410's most enticing feature, but that aside it's hard to see where the high price comes from. However, when you consider that it's a feature-packed laptop that also happens to be highly portable, it starts to make sense for business users who don't need lots of disk space but will appreciate the wireless and security features. Only the keyboard prevents it from getting a wholehearted recommendation.

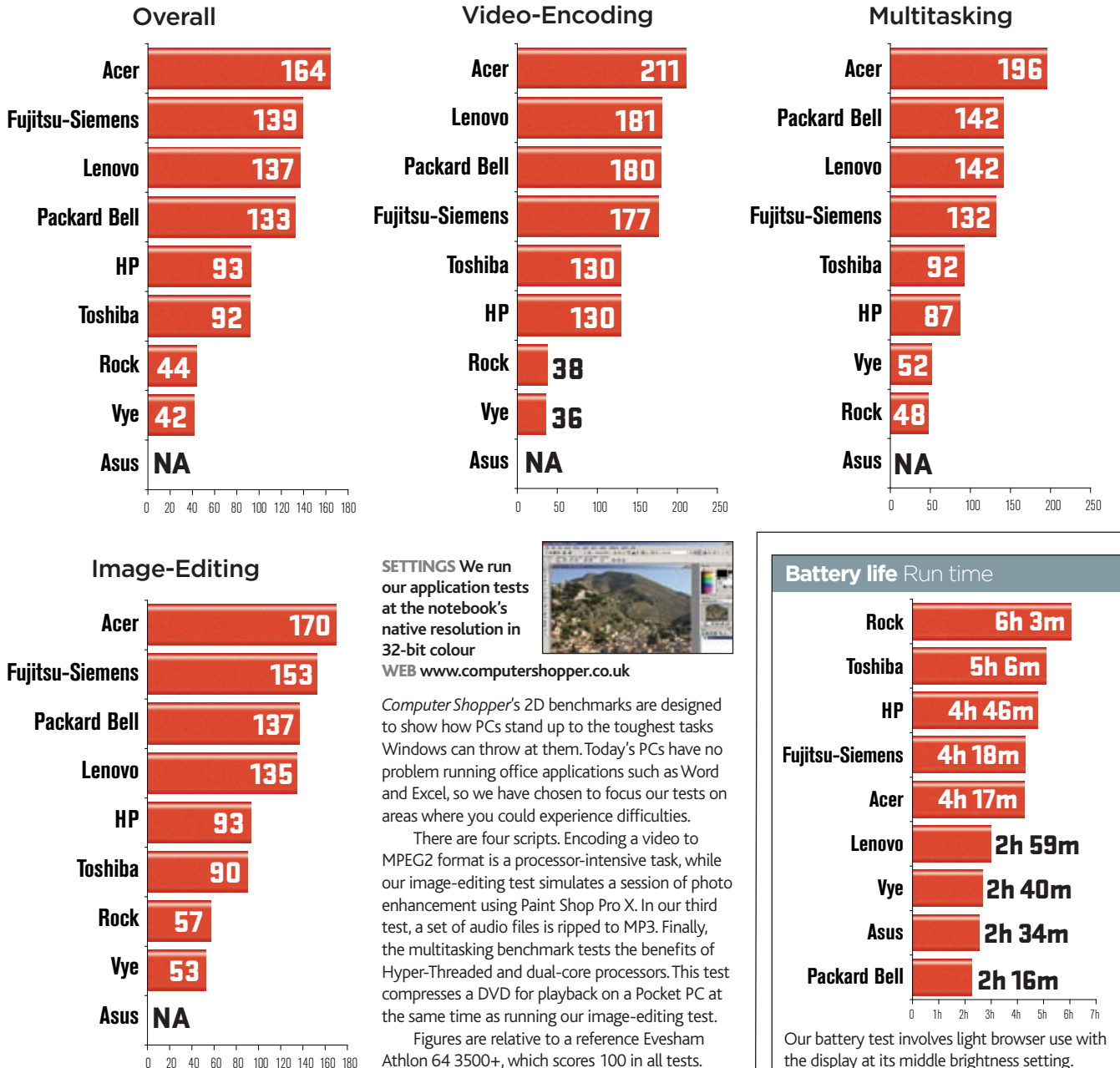
SUMMARY

- ✓ Comprehensive wireless options
- ✓ Fast processor
- ✗ Disappointing keyboard

ULTRA-PORTABLE LAPTOP Intel Core 2 Duo T7300, 1GB RAM, 80GB disk, Intel GMA X3100 graphics, DVD+/-RW +/-DL, 13.3in widescreen LCD, 1.8kg
PART CODE LKN:GBR-233100-012
DETAILS www.fujitsu-siemens.co.uk

BENCHMARKS

2D Performance Shopper application tests



Labs verdict Ultra-portable laptops

With such a wide variety of prices covered in this month's Labs, there's no single laptop that will suit everyone. If you need something extremely compact and light for working on the move and can put up with basic performance and ergonomics, Asus's Eee PC is an excellent choice and wins a Best Buy award.

Those who don't want to compromise on power or features will need to go for something heavier. Acer's Aspire 2920 is a little weightier than the other laptops in the group, but it's portable, very fast and excellent value. It's a Budget Buy. If you have more to spend, Fujitsu Siemens'

S6410 is a class act that's powerful and packed with features including a 3G modem supporting the latest connection speeds. However, both of these models' keyboards let them down a little.

Our overall winner is Toshiba's Portege R500-11B. We'd like its build quality to be a little more reassuring, but it's not enough of a concern to put us off the compelling combination of an extremely light and thin design, long battery life, an outdoor-friendly screen, plentiful storage and connectivity options and enough power for business use. It wins a *Computer Shopper* Best Buy award.

ASUS
Eee PC 701

★★★★★

COMPUTER SHOPPER
BEST BUY



ACER
Aspire 2920

★★★★★

COMPUTER SHOPPER
BUDGET BUY



TOSHIBA
Portege R500-11B

★★★★★

COMPUTER SHOPPER
BEST BUY



ULTRA-PORTABLE LAPTOPS

COMPUTER SHOPPER BEST BUY

COMPUTER SHOPPER BUDGET BUY

MANUFACTURER	ASUS	PACKARD BELL	ACER	VYE
Model	Eee PC 701	BG46-P-004	Aspire 2920	Mini-v S41
Rating	★★★★★	★★★	★★★★★	★★
Processor	Intel Celeron M 900	Intel Core 2 Duo T5450	Intel Core 2 Duo T7300	Intel A110
Speed	0.9GHz	1.66GHz	2.0GHz	0.8GHz
Memory installed	512MB	2GB	2GB	1GB
Memory slots (free)	0 (0)	2 (0)	2 (0)	1 (0)
Max memory	512MB	2GB	4GB	2GB
BIOS	AMI	AMI	Phoenix	Phoenix
Dimensions (HxWxD)	34x225x163mm	32x296x211mm	38x304x223mm	34x230x177mm
Weight	900g	1.6kg	2.1kg	1.1kg
Sound	Intel HD Audio	RealTek HD Audio	RealTek HD Audio	HD audio
Pointing device	Touch pad	Touch pad	Touch pad	Touch pad, touch stick and touch screen
Power consumption idle	14W	25W	21W	14W
Power consumption active	16W	48W	42W	17W
DISPLAY				
Screen size	7in widescreen LCD	12in widescreen LCD	12.1in widescreen LCD	7in widescreen LCD
Graphics adaptor	Intel GMA 950	Intel GMA X3100	Intel GMA X3100	Intel 945 Express
Graphics outputs	VGA	VGA	VGA, S-video	VGA
Graphics memory	Not disclosed	128MB shared	128MB shared	64MB shared
Native resolution	800x480	1,280x800	1,280x800	1,024x600
STORAGE				
Hard disk (available)	4GB (3GB)	160GB (141GB)	250GB (223GB)	80GB (75GB)
Optical drive model	N/A	HL-DT-ST GSA-T20N	Optiarc AD-7560A	HL-DT-ST GSA-U10N
Optical drive type	None	External USB DVD+/-RW +/-DL	DVD+/-RW +/-DL	DVD+/-RW +/-DL
PORTS AND EXPANSION				
USB2 ports	3	3	3	2
FireWire	0	0	0	0
Infrared port	No	No	No	No
Bluetooth	No	No	Yes	Yes
Networking	1x 10/100, 802.11b/g	1x 10/100, 802.11a/b/g	1x 10/100/1,000, 802.11a/b/g, Draft-N	1x 10/100, 802.11a/b/g
PC Card slots	None	None	1x ExpressCard/54	None
Modem	No	No	Yes	No
Legacy ports	None	None	None	None
Memory card reader	Secure Digital, MultiMedia Card	Secure Digital, MultiMedia Card, Memory Stick Pro	Secure Digital, MultiMedia Card, Memory Stick Pro, xD	Secure Digital, Memory Stick Pro, CompactFlash
Other ports	None	None	None	None
MISCELLANEOUS				
Carrying case	No	No	No	Yes
Direct CD control	No	No	No	No
Operating system	Xandros-based Linux OS	Windows Vista Home Premium	Windows Vista Home Premium	Windows Vista Home Premium
Operating system restore option	Restore disc	Restore partition	Restore partition	Restore disc
Software included	OpenOffice, Firefox, Thunderbird, Pidgin, Skype, Gwenview, Audio CD Ripper, Music Manager, SMPlayer, TuxMath, TuxPaint, games	Roxio Creator 9, Norton Internet Security FE 2007	CyberLink PowerProducer, NTI CD-Maker	None
Other standard accessories	None	1.3-megapixel webcam	0.3-megapixel webcam	1.3-megapixel webcam
Optional extras (inc VAT)	None	None	Additional battery (£51 inc VAT)	None
BUYING INFORMATION				
Company founded	1989	1926	Notebook division 1985	2007
Employees	Not disclosed	Not disclosed	Not disclosed	Not disclosed
Tech support staff	12	Not disclosed	Not disclosed	Not disclosed
Tech support times	9am-5pm Mon-Fri	24 hours, 7 days a week	9am-5.30pm Mon-Fri	9am-5pm Mon-Fri
Parts and labour warranty	Two years collect and return	One year collect and return	One year RTB	One year return to base
Price inc VAT	£240	£550	£600	£849
Price ex VAT	£204	£468	£511	£723
Details	http://eeepc.asus.com/uk	www.packardbell.co.uk	www.acer.co.uk	www.vyepc.com
Supplier	www.rlsupplies.co.uk	www.pcworld.co.uk	www.comet.co.uk	www.laptopsdirect.co.uk
Part number	EEE PC 701-W	584721	LX.ANK0X.239	RC0217CAL030

**COMPUTER
SHOPPER**
BEST BUY

ROCK	TOSHIBA	LENOVO	HP	FUJITSU SIEMENS
Pegasus 210	Portege R500-11B	ThinkPad X61s	Compaq 2710p	Lifebook S6410
★★★	★★★★★	★★★	★★★	★★★★
Intel A110	Intel Core 2 Duo U7600	Intel Core 2 Duo L7500	Intel Core 2 Duo U7600	Intel Core 2 Duo T7300
0.8GHz	1.2GHz	1.6GHz	1.2GHz	2.0GHz
1GB	1GB	2GB	1GB	1GB
1 (0)	2 (1)	2 (1)	2 (1)	2 (1)
1GB	1.5GB	4GB	4GB	4GB
Phoenix	Toshiba	Lenovo	HP	Phoenix
30x296x209mm	26x283x216mm	30x268x211mm	28x290x212mm	32x314x234mm
1.4kg	1.1kg	1.4kg	1.7kg	1.8kg
RealTek HD Audio	RealTek HD Audio	SoundMax HD Audio	SoundMax HD Audio	RealTek HD Audio
Touch pad	Touch pad	Touch stick	Touch stick, touch screen	Touch pad
12W	19W	16W	19W	30W
16W	31W	34W	26W	57W
12in widescreen LCD	12in widescreen LCD	12.1in LCD	12.1in widescreen LCD	13.3in widescreen LCD
Intel GMA 950	Intel 945GM	Intel GMA X3100	Intel GMA X3100	Intel GMA X3100
VGA	VGA	VGA	VGA	VGA, S-video (mini-jack)
64MB shared	64MB shared	384MB shared	128MB shared	128MB shared
1,280x800	1,280x800	1,024x768	1,280x800	1,280x800
80GB (75GB)	120GB (110GB)	160GB (144GB)	80GB (67GB)	80GB (75GB)
N/A	Matshita UJ-844S	N/A	N/A	Matshita UJ-852S
None	DVD+/-RW DL	None	None	DVD+/-RW +/-DL
3	3	3	2	3
0	1	1	1	1
No	No	No	No	Yes
Yes	Yes	Yes	Yes	Yes
1x 10/100/1,000, 802.11a/b/g, Draft-N	1x 10/100/1,000, 802.11a/b/g, Draft-N	1x 10/100/1,000, 802.11a/b/g, Draft-N	1x 10/100/1,000, 802.11a/b/g	1x 10/100/1,000, 802.11a/b/g, Draft-N
1x CardBus	1x CardBus	1x CardBus	None	1x CardBus
Yes	No	Yes	Yes	Yes
None	None	None	None	None
Secure Digital, MultiMedia Card, Memory Stick Pro	Secure Digital	Secure Digital	Secure Digital	Secure Digital, MultiMedia Card, Memory Stick Pro, xD
None	None	None	None	None
No	Yes	No	No	Yes
No	No	No	No	No
Windows XP Professional	Windows Vista Business	Windows XP Professional	Windows Vista Business	Windows Vista Business
Restore partition	Restore disc	Restore partition	Restore partition	Restore disc
Roxio Creator 9 LE	None	None	None	Nero 7 Essentials
Fingerprint reader	None	HSDPA SIM card, fingerprint reader	Fingerprint reader	HSDPA SIM card slot, fingerprint reader, 1.3-megapixel webcam, optical mouse
Unknown	Dynadock – USB Port Replicator with DVI (UXGA) (£100), Advanced Port Replicator III Plus (£194), Express Port Replicator (£170), USB 2.0 Port Replicator II (UK) with Network port (£50)	Four-cell battery 40Y7001 (£89), eight-cell battery 40Y7003 (£119), Extended Life Battery 40Y7005 (£119), ThinkPad X6 UltraBase 40Y8116 (£152), CD-RW/DVD-ROM Combo II UltraBay Slim Drive 12 40Y8621 (£109)	None	Port replicator
1992	1985	1984	1939	1999
30	Not disclosed	19,000	140,000	Not disclosed
Not disclosed	50	42	Not disclosed	40
9am-5pm Mon-Fri, 10am-2pm Sat	8am-12am Mon-Sun	9am-5.30pm Mon-Fri	8.30am-6pm Mon-Fri	9am-5.30pm Mon-Fri, 10am-2pm Sat
Three years collect and return	One year collect and return	Three years collect and return	One year collect and return	Three years collect and return
£1,056	£1,096	£1,190	£1,197	£1,245
£899	£933	£1,013	£1,019	£1,060
www.rockdirect.com	www.toshiba.co.uk	www.lenovo.com/uk	www.hp.co.uk	www.fujitsu-siemens.co.uk
www.rockdirect.com	www.morecomputers.co.uk	www.laptopsdirect.co.uk	www.hp.co.uk	www.laptopsdirect.co.uk
P210	PPR50E-00L048EN	UK44CUK	RU539ET#ABU	LKN:GBR-233100-012